

# THE GREENBRIER VALLEY

## ECONOMIC OUTLOOK

2019-2024



### **Greenbrier Valley Economic Outlook**

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## Recent Economic Performance

The Greenbrier Valley<sup>1</sup> has been a mostly stable economic region for nearly the past four years. After experiencing a loss of nearly 1,400 jobs between early-2012 and mid-2014, the four-county area has struggled to gain much momentum in the intervening time frame. Portions of the region suffered additional setbacks as a direct result of the massive damage and loss of life caused by the major flooding event in 2016. Overall, while some growth in the region's hardwood industries and export-driven gains in coal output have bolstered Greenbrier Valley's economy over the past couple of years, the area continues to see payrolls hover close to the lows briefly observed at the height of the Great Recession and are on par with levels recorded during the mid-1990s.<sup>2</sup>

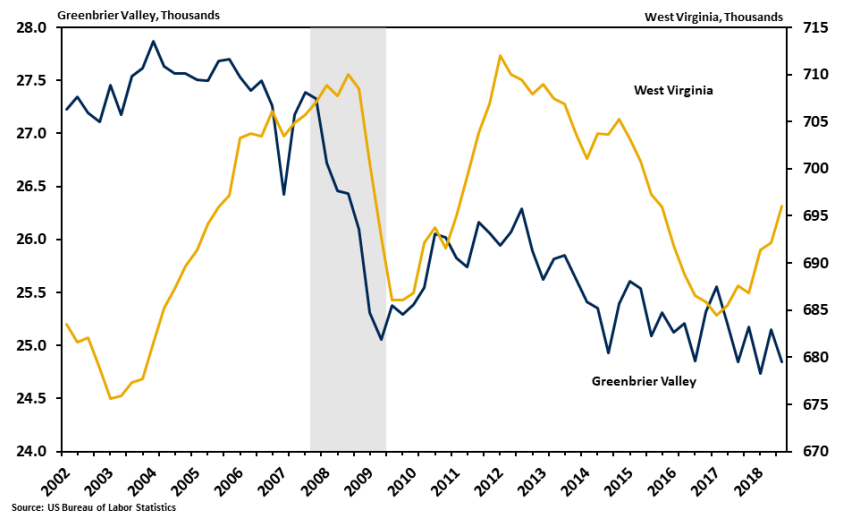
**PERFORMANCE BY COUNTY** Although lacking a major population center like other economic regions in West Virginia, Greenbrier County represents the economic center of Greenbrier Valley's economy. Greenbrier County contains approximately 50 percent of the region's employment base and hosts a wide array of resource-based industries including timber production, wood products manufacturing and coal mining. In addition, the area serves as a regional- and national-level tourist attraction thanks to its bounty of parks, scenic areas and forests as well as the internationally-renowned Greenbrier Resort. The expansion in hardwoods-related production and coal output have buoyed local economic activity during the past two years, as has the growing niche of food and drinking tourism businesses in Lewisburg and other locales.

However, Greenbrier County has experienced limited growth overall over the past few years. The 2016 flood has been a factor in hampering the county's economic recovery due to the extensive damage caused to numerous homes and businesses. A few closures of large retailers, which were connected to broader national-level trends

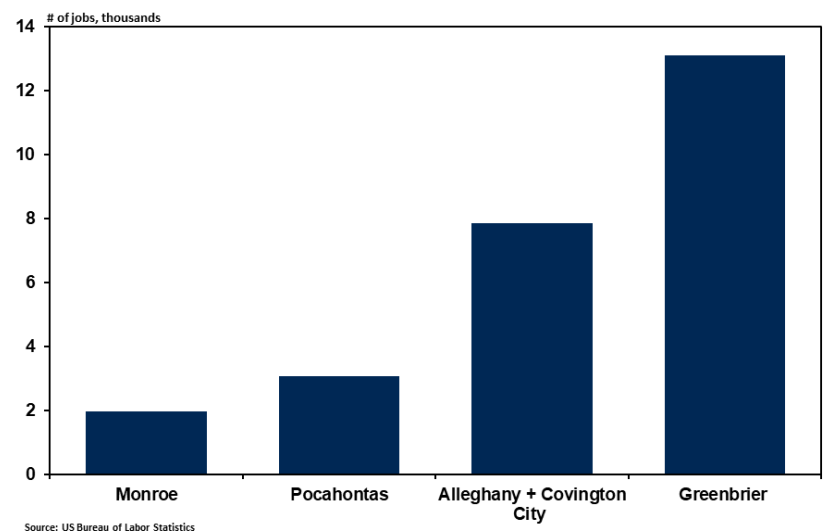
in the retail sector, have hurt as well while ABB's impending closure of its analytic equipment manufacturing facility in Lewisburg will weigh on growth following the loss of 130 high-wage jobs.

Although technically part of the Allegheny Highlands, the combined area of Alleghany County and independent city of Covington in Virginia are a key part of the Greenbrier Valley economy via the large numbers of commuters

**Figure 1: Total Employment**



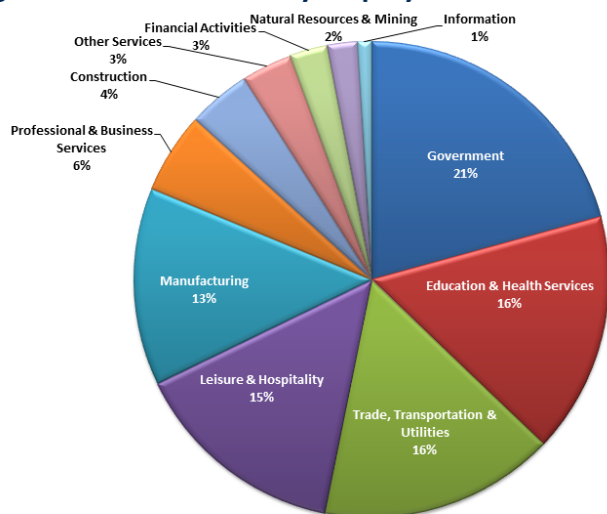
**Figure 2: Total Average Employment by County (2017)**



<sup>1</sup> For this report, The Greenbrier Valley is comprised of four areas: Greenbrier, Monroe and Pocahontas counties in West Virginia and the combined area of Alleghany County and Covington City in Virginia.

<sup>2</sup> Sources for historical information are noted in each figure.

**Figure 3: Greenbrier Valley Employment Distribution by Sector**



Source: US Bureau of Labor Statistics; 2017 data.

flowing back and forth across the state border. These two combined areas account for less than third of the Greenbrier Valley's jobs, but are a disproportionate driver of manufacturing activity with more than half of the region's payrolls and output – much of which is found at WestRock Co.'s bleached paperboard and packaging materials operations along I-64. Long-term structural changes in the industry and productivity gains have led to a decline in paperboard manufacturing payrolls over the past couple of decades, but WestRock has invested nearly half a billion dollars in its local operations and recently received a multi-year \$248 million grant to aid in worker skill development and increase capital spending.

Monroe and Pocahontas counties are the smallest in the Greenbrier Valley region, but have actually outperformed the area's larger counties to some extent over the past few years. Monroe County tends to be more of a bedroom community, sending a few thousand residents to neighboring counties in Virginia and West Virginia. However, Monroe plays a critical role in regional manufacturing activity with aerospace manufacturer United Technologies. The county has also experienced a boost in construction activity over the past year or so due to the construction of the Mountain Valley Pipeline.

Pocahontas County has recorded modest payroll growth since 2014, with most of it connected to hardwood production and early-stage wood products manufacturing. Similar to Monroe and many other counties in West Virginia, Pocahontas County has experienced a jump in construction activity linked to natural gas pipeline

infrastructure development. An ongoing court-ordered stoppage of the Atlantic Coast Pipeline has caused all workers to be laid off and significant uncertainty remains over the future of the project.

**WOOD PRODUCTS** Despite seeing a noticeable decline in its footprint over the past couple of decades, manufacturing activity plays a significant role in the Greenbrier Valley's economy. Indeed, manufacturing accounts for more than 13 percent of the area's payrolls and nearly a quarter of overall output – both of which represent more than double the statewide average. With two counties in West Virginia's Hardwood Alliance Zone and nearly 1.5 million acres of forested land area containing 5.7 billion board feet of various

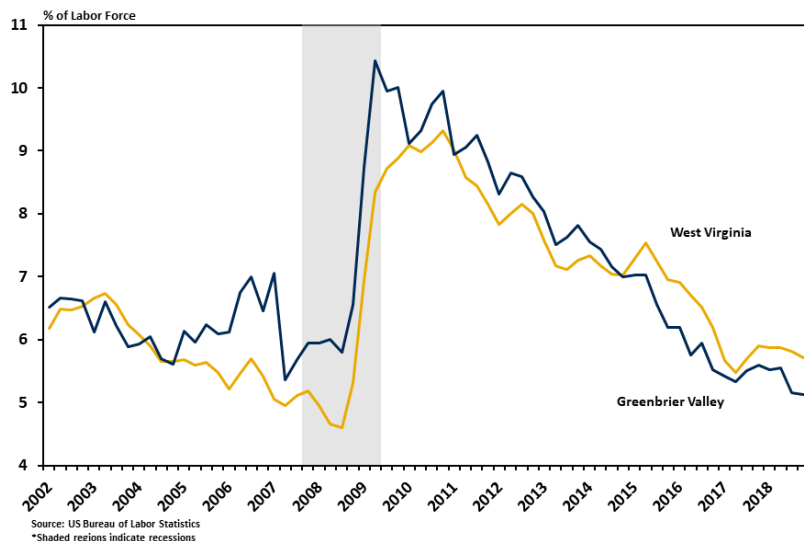
hardwood species inventory available for harvesting (most of which is available for timber production), the wood products supply chain have served as a linchpin of the region's history and economic identity for more than a century.

Board, veneer, framing lumber and paperboard products have served as the foundation, but the industry has the potential to grow in scope given recent developments and could bolster the value added potential of harvested timber in the state. For example, the WV Great Barrel Company will produce barrels for bourbon, whiskey and rye distillers both inside and outside of the state in White Sulphur Springs using products sourced from a stave mill in Monroe County. The barrel manufacturing facility (cooperage) will lead to the addition of 80 to 90 workers at the mill and barrel production facility combined once operations start in summer 2019, but additional job gains are likely as the cooperage will source white oak harvested from area forests.

**TRAVEL & TOURISM** Given the wide-ranging scenic attractions and outdoor activities offered throughout the Greenbrier Valley, scenic and adventure tourism represent an identifiable strength of the region's economy. The Greenbrier Valley offers great opportunities for tourists and adventurers to hike, camp, fish or simply take in the visual scenery available in the region. Overall, the tourism industry accounts for roughly 15 percent of the region's payrolls, with The Greenbrier regarded as the most identifiable attraction in the area. The world-renowned resort is the largest employer in Greenbrier County with

roughly 2,000 employees and is one of the state's high value-added tourist destinations as it attracts wealthy visitors from other states and countries. In addition, the resort has played host to NFL training camps, as well as professional tennis and golf tournaments in recent years.

**Figure 4: Unemployment Rate**



Snowshoe Mountain is another key component of the Greenbrier Valley's tourism industry. Generally regarded as one of the top ski destinations on the East Coast, the mountain resort is Pocahontas County's largest employer economy and attracts customers from all over West Virginia and surrounding states. The resort invested nearly \$4 million in upgrades to its snowmaking and grooming technology to open more ski trails at an earlier point in the season. Despite a relatively mild winter with below-average snowfall totals, Snowshoe was able to extend its 2018/2019 winter ski season to March 31, due in part to this investment.

**OTHER NATURAL RESOURCES** While timber is typically identified as the Greenbrier Valley's major resource-based industry, the region also plays host to some coal mining and ranks as one of the state's leading counties for agricultural production. Regional coal production occurs entirely in Greenbrier County and tends to be focused on high-quality metallurgical coal. After seeing coal output top nearly 1.2 million short tons in 2011, 2012 and 2014, production fell by more than half by 2016 to an annual total of just 420,000 tons. Large increases in export demand for metallurgical coal throughout Europe, Asia

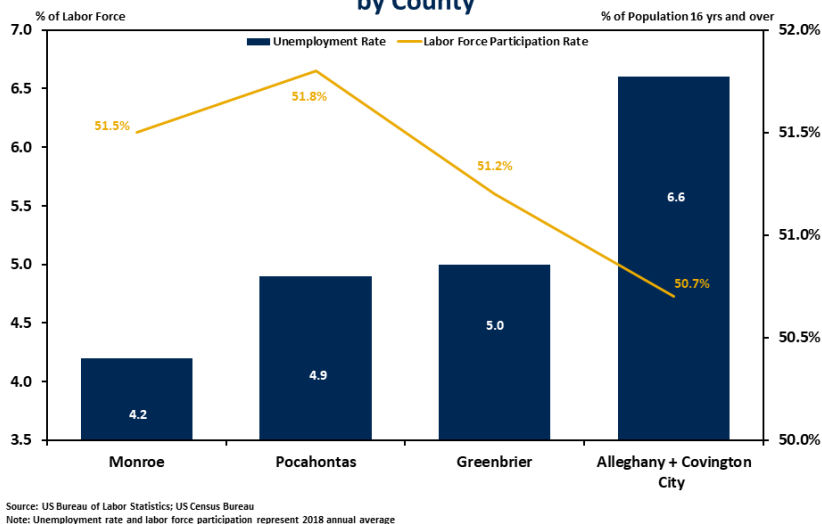
and South America have boosted the area's production back up to nearly 1 million short tons in 2018 and lifted miner payrolls to nearly 300 by the second half of the year.

Agriculture tends to be a relatively minor part of West Virginia's economy, but the Greenbrier Valley is one of a few limited areas where agricultural activity has an appreciable presence. The 2017 Census of Agriculture indicate the region contained about 2,500 farming operations in 2017, with cattle farming ranking as the region's leading farming activity. Overall, data indicate gross sales of crops and livestock by local farms totaled more than \$100 million in 2017, the equivalent of nearly 5 percent of personal income for the region as a whole.

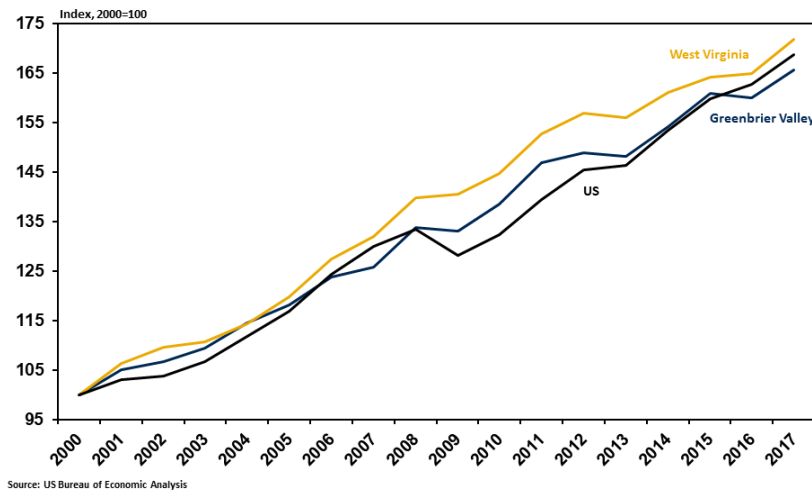
In addition to the direct economic impact caused by farming activity in general, the region's agricultural sector has begun to factor into trends affecting other segments of the economy. For example, evidence suggests that farm-to-table dining destinations and agritourism travel options have emerged in communities in Pocahontas, Greenbrier and Monroe counties.

**OTHER SECTORS** Trade, transportation and utilities is one of the largest sources of employment in the Greenbrier Valley. Unfortunately, this sector has seen a steady decline in total employment since the onset of the Great Recession, with retail and wholesale trade suffering almost all these losses. Moreover, the demand landscape for

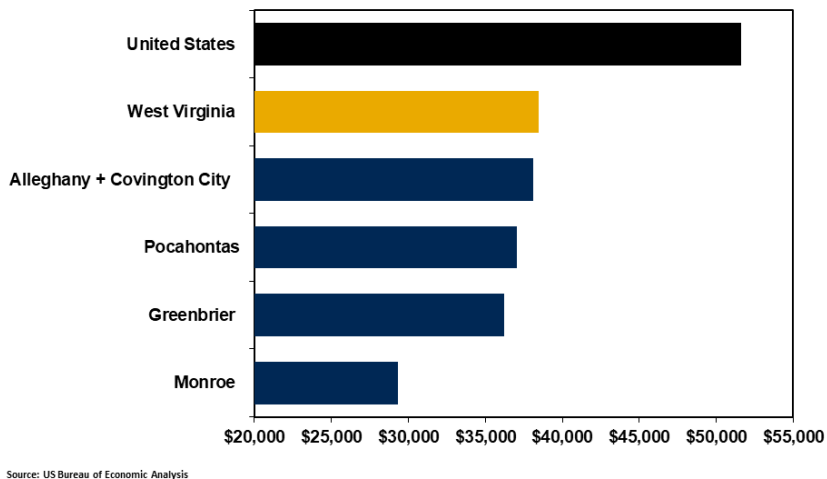
**Figure 5: Unemployment and Labor Force Participation by County**



**Figure 6: Per Capita Personal Income**



**Figure 7: Per Capita Personal Income by Area (2017)**



consumers has shifted from traditional retailers to online retailers, resulting in several large retailers to close stores in the region.

Healthcare services plays a major role in the Greenbrier Valley economy, reflecting the region's high demand for health care. The sector is nearly 10 percent larger compared to 2007, but consolidations and structural changes within the industry along with a declining population base have caused the sector to shed nearly 400 jobs since the beginning of 2012. The public sector, which accounts for more than one in five jobs in the region, has remained a relatively stable source of employment over the past decade. The 2016 flood has strained several local governments in the region due to large losses in

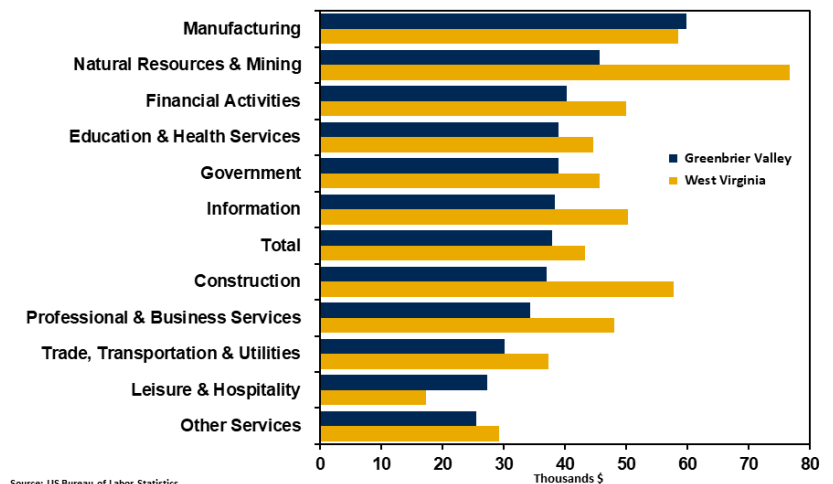
tax revenue collections linked to the destruction of businesses and homes. In addition, the general trend of declining population and sluggishness in economic activity for the past several years have dampened public sector investment throughout the area.

**UNEMPLOYMENT** The Greenbrier Valley Area has seen its unemployment rate decline steadily since 2009. By 2015 the Greenbrier Valley's unemployment rate dipped below the statewide average for the first time since the early 2000s and has remained below that mark in every quarter since then. The region's unemployment rate averaged 4.6 percent during the second half of 2018, nearly a half percentage point below the statewide reading.

Jobless rates show considerable variation across the region's component counties. Monroe County notched the lowest annual average rate of unemployment within the region at 4.2 percent during 2018, while the combined area of Alleghany County and Covington recorded the highest incidence of unemployment, with 6.6 percent of the labor force currently out of a job.

**LABOR FORCE** Although low unemployment rates might reflect a healthy and vibrant labor market, the results tend to be more mixed for the Greenbrier Valley. Part of the area's drop in unemployment rate can be attributed to job gains, but most of those gains can be connected

**Figure 8: Average Annual Salary by Major Sector (2017)**





to commuters traveling outside of the four-county area. Indeed, since 2014, the Greenbrier Valley's labor force has increased by more than 1,000 people. At the same time, workforce participation rates are low throughout the four-county region. Overall, just over 51 percent of the adult population in the area either holds a job or is actively looking for work in the region and the shares are nearly identical in each county, lagging the statewide and national average by 3 and 12 percentage points, respectively.

**INCOME** Per capita personal income for the Greenbrier Valley is estimated at approximately \$35,600 for calendar year 2017. This marked a 3.6 percent increase versus 2016, and leaves overall per capita income for the region nearly 13 percent above 2011 levels (not adjusting for inflation, as presented in Figure 6). After adjusting for inflation, however, per capita personal income in the region has increased more than 4 percent over this same six-year period, indicating residents have seen their real purchasing power increase moderately in recent years.

Alleghany/Covington residents received the highest average income level of \$38,100 during 2017. The region's three remaining counties have per capita income levels noticeably lower than the statewide average, ranging between \$29,300 and \$37,000 in 2017. Income levels in the region area are boosted to some extent by the high wages that are paid within several of the resource-based industries as well as portions of local manufacturing activity. At the same time, the composition of income holds down income levels in most of the region. Indeed,

due to a combination of demographic and socioeconomic circumstances, federal government transfer payments such as Social Security, Medicare, etc. account for nearly one third of income overall, rising to as much as 39 percent in Pocahontas County.

**POPULATION** After recording large population losses in the early 1980s, the Greenbrier Valley's population has experienced moderate, yet steady, declines in the number of residents since the early 1990s. In terms of the county-by-county composition of those losses, most of the region's population declines can be attributed to Alleghany/Covington. Since 2000, the combined county-city area has seen its population total shrink by more than 12 percent (or 3,000 residents), while Greenbrier and Monroe counties have added residents overall during this same time period. Pocahontas County's population count declined by roughly 7 percent since 2000, equal to a loss of just over 600 residents.

**DEMOGRAPHIC CHARACTERISTICS** Just as with the rest of the state, deaths outnumbering births have been a key factor affecting local demographic trends. Part of this is due to the area's larger-than-normal share of elderly residents, but also higher death rates from a host of poor health outcomes and the rising incidence of drug overdoses among younger cohorts living in the region play a major role. Finally, the four-county region lags both state and national averages in measures of educational attainment among the adult population, as less than 17 percent of residents aged 25 years and older possess at least a bachelor's degree.

**Figure 9: Summary Population Profiles**

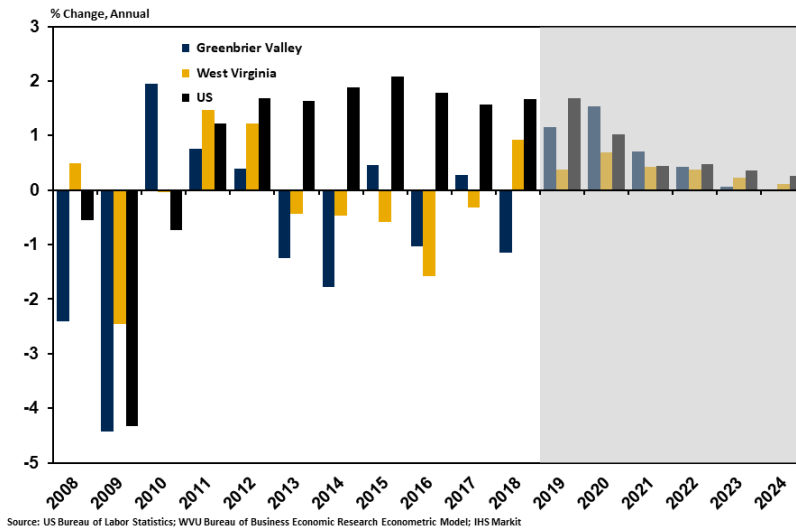
	Greenbrier Valley	West Virginia	United States
<b>Total Population (2017)</b>	<b>77,798</b>	<b>1,815,857</b>	<b>325,719,178</b>
<b>% Population Under 18 (2017)</b>	<b>18.8%</b>	<b>20.4%</b>	<b>22.6%</b>
<b>% Population 65 Years + (2017)</b>	<b>22.4%</b>	<b>19.4%</b>	<b>15.6%</b>
<b>Population with Less than High School Diploma (2017, 25 yrs. +)</b>	<b>15.5%</b>	<b>14.7%</b>	<b>13.0%</b>
<b>Population with High School Diploma, No College (2017, 25 yrs. +)</b>	<b>43.9%</b>	<b>40.5%</b>	<b>27.5%</b>
<b>Population with Some College (2017, 25 yrs. +)</b>	<b>24.0%</b>	<b>25.3%</b>	<b>29.1%</b>
<b>Population with Bachelor's Degree or Higher (2017, 25 yrs.+)</b>	<b>16.6%</b>	<b>19.6%</b>	<b>30.3%</b>
<b>Median Age (2017)</b>	<b>46.4</b>	<b>42.2</b>	<b>37.8</b>
<b>Mean Household Income (2017)</b>	<b>\$53,971</b>	<b>\$59,634</b>	<b>\$81,283</b>
<b>Average Household Size (2017)</b>	<b>2.32</b>	<b>2.50</b>	<b>2.71</b>

Source: US Census Bureau

## Economic Outlook

Expectations for the West Virginia and US economy during the 2019-2024 forecast horizon will have a significant impact on the performance of the Greenbrier Valley going forward.<sup>3</sup> The forecast calls for the region to return to growth after a prolonged period of declining or stable levels of economic activity.

**Figure 10: Employment Growth Forecast**



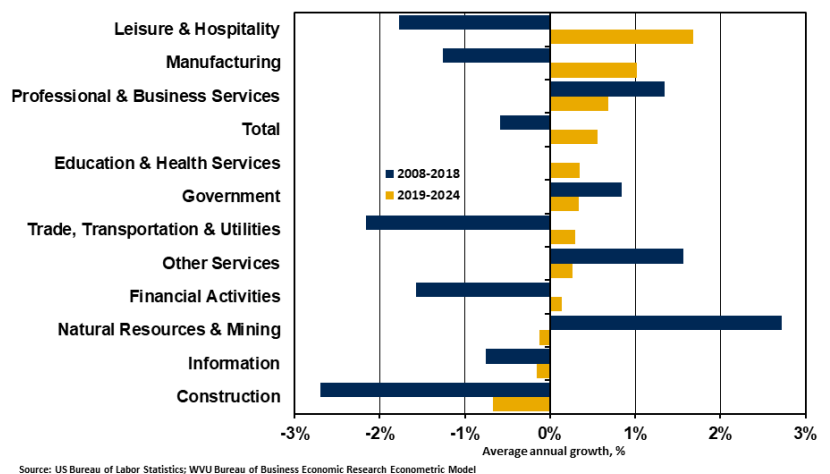
Overall, we anticipate total employment will increase at an average annual rate of roughly 0.6 percent through 2024. Payrolls are expected to grow at their fastest rate over the first half of the outlook period, increasing at an average annual rate of 1.1 percent through 2021 and slowing considerably beyond the latter half of the forecast horizon. Even with the upcoming losses of jobs connected to ABB's closure of its manufacturing and equipment research and testing facility later this year, manufacturing activity will be a key factor driving growth in the region's economy going forward.

**TRAVEL & TOURISM** Leisure and hospitality is expected to register the fastest rate of growth during the outlook period. However, some of the sector's outsized increase is connected to issues related to data collection in late-2018 and early-2019. Nonetheless, the sector should see solid growth over the next several years as the area's major attractions remain a magnet for a range of

tourists from other parts of the state as well as the rest of the US. The region's wealth of natural amenities and outdoor recreational activities will remain a strength for this sector going forward, and growing niche segments such as adventure, "foodie" and agritourism have the potential to expand the quantity and quality of options available to visitors. At the same time, segments of the leisure and hospitality sector that are more heavily linked to local spending patterns, such as restaurants, will likely face some pressure going forward as population numbers continue to shrink in certain parts of the region.

**CONSTRUCTION** The construction sector over the long term is expected to lose jobs over the next five years, but this largely reflects timing as the forecast assumes the Atlantic Coast Pipeline will be re-started later this year. This will lead to the addition of several hundred construction jobs in the late-2019/early-2020 time frame that will ultimately fade upon completion of the project. In addition, work on the Mountain Valley Pipeline through Greenbrier and Monroe counties should be completed later this year, leading to a drop in construction sector payrolls in 2020. Finally, publicly-funded infrastructure spending is expected to increase appreciably over the middle part of the forecast horizon,

**Figure 11: Greenbrier Valley Employment Growth Forecast by Sector**

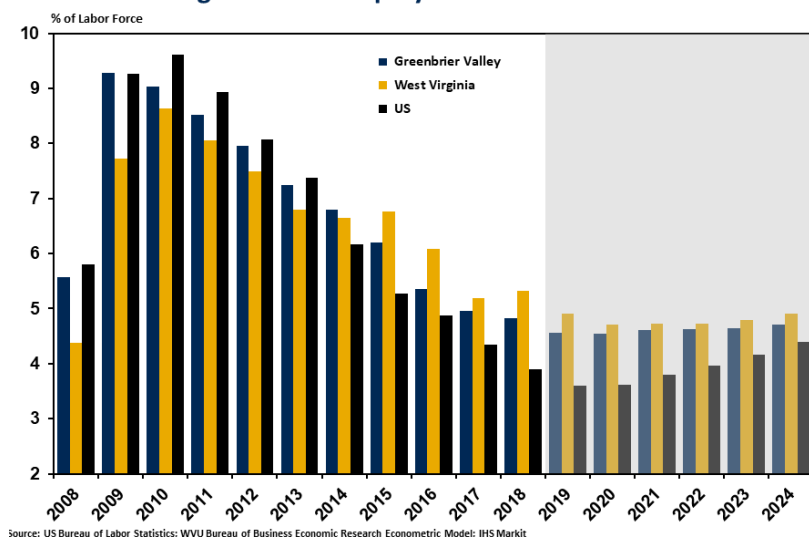


<sup>3</sup> All forecast estimates presented herein are derived from the West Virginia University Bureau of Business & Economic Research Econometric Model unless otherwise noted.

as projects connected to the Roads to Prosperity bonding plan begin and state lawmakers allocate more funding to repair neglected secondary roadways and bridges in the coming years. Finally, upgrades to the Lewisburg water plant offer another example of increased public works spending as the \$38 million project will provide major improvements to local water treatment and delivery systems.

**MANUFACTURING** The Greenbrier Valley’s manufacturing sector is expected to record average annual job growth of 1 percent over the next five years. Some of this increase will reflect easy comparisons to the initial year of the forecast horizon, as ABB’s impending closure will cause 2019 to look uncharacteristically weak. However, most of the sector’s growth will tend to reflect a healthy backdrop for the region’s hardwood-related manufacturing industries. Moreover, additions such as West Virginia Barrel Company’s distillery barrel manufacturing facility in White Sulphur Springs have the potential develop more opportunities for creating value added production from the region’s harvested timber.

**Figure 12: Unemployment Rate Forecast**



**NATURAL RESOURCES** Export demand for metallurgical coal should buoy the area’s coal output for the near term before seeing moderate declines in activity over the longer term. Barring any major swings in long-term interest rates or further erosion in trade relations with major US trading partners, domestic and international demand for regional timber harvests should remain strong during the outlook period. Agriculture will also remain a mainstay of the Greenbrier Valley’s economic landscape going forward,

and expanding farm-to-table dining and other forms of agritourism options, as well as the addition of niche crops such as hemp and lavender, could boost the farm sector’s footprint further.

**OTHER SECTORS** Professional and business services is expected to see the fastest rate of job growth among the New River Gorge Area’s largest sectors over the next five years. Some of these gains will fall in line with broader national economic trends that affect demand for business support functions. However, the rebound in coal output will also benefit the sector as mines hire more contract labor and increase spending on services from engineering firms and other technical support functions.

Education and health services is expected to add jobs at a rate of just over 0.4 percent annually through 2024. Healthcare demand is expected to grow consistently within the region, reflecting the region’s large share of elderly residents and above-average proportion of individuals with disabilities. The sector has faced uncertainty in recent years due to attempted legislative

changes and legal challenges to the Affordable Care Act. While these challenges have generally failed, the controversial nature of certain provisions and the highly partisan environment in the federal government leaves open the possibility of future court challenges or legislative changes.

The outlook for the Greenbrier Valley’s public sector remains positive overall, as payrolls are expected to increase between 0.3 and 0.4 percent annually through 2024. Most of these gains will come at the the state government level as improvements to the state’s overall fiscal picture vis-à-vis surging growth in severance collections along with healthy gains in income and other classes of revenue during the past few quarters.

Some of the region’s local governments will face some stress as they deal with declining populations and the ongoing recovery of the tax base association with the 2016 flood. At the same time, the Mountain Valley Pipeline and Atlantic Coast Pipeline projects, once completed and entering full service should provide county and local governments some growth in tax receipts that could offset offset declining collections in other payment categories.



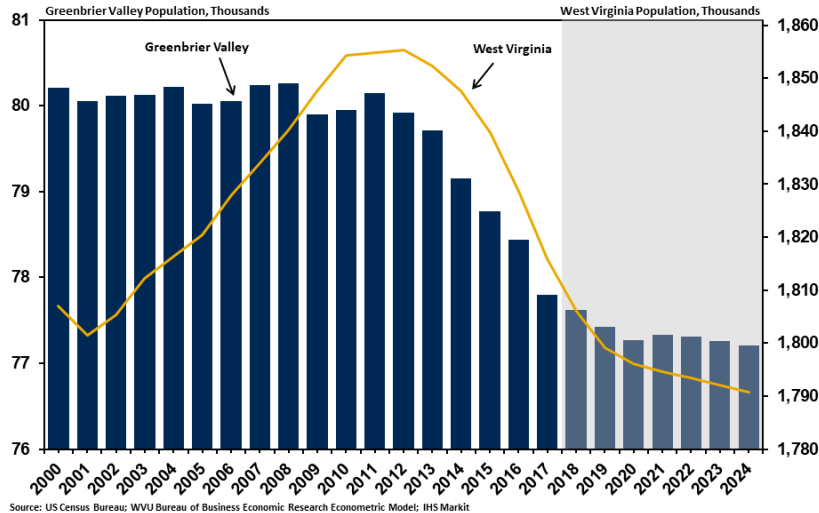
The trade, transportation and utilities sector is expected to see slight gains of 0.3 percent annually during the outlook period. However, retail and wholesale trade will remain the weakest segments as ongoing structural changes in each sector weigh heavily on payroll growth for the foreseeable future. Aside from the challenge posed by underlying demographic trends in the four-county area, Amazon and other online-based platforms are expected to grab further market share from traditional brick-and-mortar retailers and even expand their delivery options as new technologies are adopted. Merchant wholesalers will feel the direct impact of these structural market shifts, though some of their losses will be absorbed by transportation and warehousing firms.

**UNEMPLOYMENT OUTLOOK** Unanticipated changes in labor force participation within the Greenbrier Valley’s labor force could cause the forecast for the regional unemployment rate to differ significantly from both its projected level and path. With that said, the forecast calls for the regional unemployment rate to fall slightly from its current levels and eventually stabilize between 4.5 and 4.6 percent.

growing source of income overall, reflecting higher Social Security and Medicare receipts throughout the Greenbrier Valley as more residents enter retirement. Overall, receipts from these and other federal transfer payment programs will account for approximately 34 percent of income by 2024.

**POPULATION** The Greenbrier Valley population is expected to shrink slightly over the next five years. Greenbrier and Monroe counties will likely be the most likely within the region to post small gains, but also have the greatest potential to see larger increases in population if communities such as Lewisburg, White Sulphur Springs, Peterstown and Union have the ability to capitalize on marketing the area’s rural appeal to residents from other areas. In addition, workforce development will be a crucial step in arresting any potential population declines in the region over the long term, as the area’s low share of college-educated residents (both 4-year degrees, as well as 2-year and certificate training programs) needs to be addressed to increase its attractiveness to local entrepreneurs seeking to expand or prospective employers looking to move into the area.

Figure 13: Population Forecast



**INCOME** Inflation-adjusted per capita income in the New River Gorge Area is projected to increase at an average annual rate of 1.5 percent through 2024, outpacing the statewide average rate of growth over the same time period. Real wage and salary growth is expected to lag the region’s overall income gains, as the fastest-growing sources of income will be connected to transfer payments and a rebound in small business earnings (proprietor’s income). Transfer payments will constitute the fastest-